

DERWENT-ACC-NO: 1997-130734

DERWENT-WEEK: 199712

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TITLE: Light diode matrix manufacture with  
x-y coordinate addressing - involves formation of  
address p-rails on base containing gallium alloy by zone  
melting and recrystallisation

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PATENT-ASSIGNEE: ARTAMONOV M M[ARTAI]

PRIORITY-DATA: 1986SU-4050883 (February 6, 1986)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	
LANGUAGE		MAIN-IPC	
SU 1347831 A1		July 10, 1996	N/A
002	H01L 033/00		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
SU 1347831A1	N/A	
1986SU-4050883	February 6, 1986	

INT-CL (IPC): H01L033/00

ABSTRACTED-PUB-NO: SU 1347831A

BASIC-ABSTRACT:

Address p-rails in x direction are made by zone melting using a temp gradient perpendicular to the base (1) plane. The working elements (6) on the face side are made by local thermal oxidation across the epitaxial layer thickness at the temp of 1033 - 1073 deg. K in the nitrogen-oxygen mixture

containing 40 -60 %  
of oxygen. These elements are subject to conventional  
switching in the y  
direction at the epitaxial layer side. The address p-rails  
are formed by local  
application of the masking layer on the base made of  
gallium alloy containing  
germanium or zinc in the quantity of 2 - 4 %. The temp  
gradient is 20 - 40 deg.  
K / cm and the recrystallisation rate is 5 - 200 microns  
per hour.

USE/ADVANTAGE - Method is used in manufacture of integrated  
semiconductor  
circuits. Percentage of good products is increased.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: LIGHT DIODE MATRIX MANUFACTURE COORDINATE  
ADDRESS FORMATION

ADDRESS P RAIL BASE CONTAIN GALLIUM ALLOY ZONE  
MELT  
RECRYSTALLISATION

DERWENT-CLASS: U12

EPI-CODES: U12-A01A1A; U12-A01A3;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1997-108008

